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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,167	01/08/2002	Helmut Kreuzer	1764	4987

7590 12/21/2004  
Striker Striker & Stenby  
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EXAMINER

KIM, PAUL D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/937,167	<b>Applicant(s)</b> KREUZER ET AL.	
	<b>Examiner</b> Paul D Kim	<b>Art Unit</b> 3729	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 06 October 2004.
- 2a)  This action is **FINAL**.                      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-12 and 20 is/are pending in the application.  
4a) Of the above claim(s) 10 and 20 is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-3,6,7,11 and 12 is/are rejected.
- 7)  Claim(s) 4,5,8 and 9 is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 20 September 2001 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \*    c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/20/01, 5/14/04.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other: \_\_\_\_\_

### DETAILED ACTION

This office action is a response to the restriction requirement filed on 10/6/2004.

#### *Response to the Election of Species*

1. Applicant's election of Species A, claims 1-9, 11 and 12, in the reply filed on 10/6/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claim 20 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/6/2004.

#### *Drawings*

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: "a cylindrical ring shape (52)" recited in lines 7-8 does not in the drawings. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

5. Claims 1-9, 11 and 12 are objected to because of the following informalities:

Re. Claim 1: The phrase "its" as recited in line 6 is not clear what it is meant.

Clarification is required.

Re. Claim 2: The phrase "its" as recited in line 2 appears to be the "core".

Clarification is required.

Re. Claim 3: The phrase "a slot shape" as recited in lines 2-3 appears to be --the slot shape--.

Re. Claim 4: The phrase "a slot shape" as recited in lines 2-3 appears to be --the slot shape--.

Re. Claim 9: The phrase "its" as recited in line 3 is not clear what it is meant.

Clarification is required.

Appropriate correction is required.

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***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 6, 7, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re. Claim 6: The phrase "the overhanging winding side (36)" as recited in line 2 and "the non-overhanging winding side (36)" as recited in line 3 renders the claim vague and indefinite. It is unclear as to how the "winding side (36)" is applied to both the overhanging winding side and the non-overhanging winding side. Clarification is required.

Re. Claim 11: The phrase "the conclusion of the bending" as recited in line 3 lacks antecedent basis.

Re. Claim 12: The phrase "the bending" as recited in line 2 and "the ends" as recited in line 3 lack antecedent basis.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1, 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher et al. (US PAT. 5,212,419) in view of Miura et al. (US PAT. 6,218,758).

Fisher et al. teach a process of forming an electrical device comprising steps of: providing a core (236), having a substantially parallelepiped shape (240) with slots extending parallel on one side as shown in Fig. 17; inserting a core winding (238); and reshaping the core together with the core winding into a cylindrical ring shape (as shown in Fig. 6) with radially inward-oriented slots and joined together (as per **claim 12**) (see also col. 6, line 63 to col. 8, line 37).

However, Fisher et al. do not teach that all the winding inserted into each slot are pressed into a slot shape in a tool and reshaped before being inserted into the slot. Miura et al. teach a process of forming an electrical machine including a step of inserting a reshaped coil into a slot of a core as shown in Fig. 2. Miura et al. teach that the wires (equivalent with the core windings) are inserted into a mold having the required trapezoidal shape (equivalent with a slot shape or a cross sectional shape as per **claim 3**) followed by pressing the wires and maintain the required trapezoidal shape before being inserted into the slot of the core (as recited in col. 5, line 15 to col. 6, line 11) in order to simplify for producing the coil pieces. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify a process of fabricating a core winding of Fisher et al. by reshaping the coils by a mold (tool) into the required shape as taught by Miura et al. in order to simplify for producing the coil pieces.

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10. Claims 1-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (US PAT. 5,212,419) in view of Miura et al. (US PAT. 6,218,758).

Huang et al. teach a process of forming an electrical device (stator) comprising steps of: providing a core (22), having a substantially parallelepiped shape (as shown in Fig. 4b) with slots extending parallel on one side; inserting a core winding as shown in Figs. 6 and 10; and reshaping the core together with the core winding into a cylindrical ring shape (as shown in Fig. 6) with radially inward-oriented slots and joined together (as per **claim 12**) (see also col. 6, line 63 to col. 8, line 37).

As per claim 2 there is one half-tooth (32a, 32b) each in the circumferential the core so that on each of the core one half-tooth ends is joined together.

However, Huang et al. do not teach that all the winding inserted into each slot are pressed into a slot shape in a tool and reshaped before being inserted into the slot. Miura et al. teach a process of forming an electrical machine including a step of inserting a reshaped coil into a slot of a core as shown in Fig. 2. Miura et al. teach that the wires (equivalent with the core windings) are inserted into a mold having the required trapezoidal shape (equivalent with a slot shape or a cross sectional shape as per **claim 3**) followed by pressing the wires and maintain the required trapezoidal shape before being inserted into the slot of the core (as recited in col. 5, line 15 to col. 6, line 11) in order to simplify for producing the coil pieces. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify a process of fabricating a core winding of Huang et al. by reshaping the coils by

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a mold (tool) into the required shape as taught by Miura et al. in order to simplify for producing the coil pieces.

***Allowable Subject Matter***

11. Claims 6, 7 and 11 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. Claims 4, 5, 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

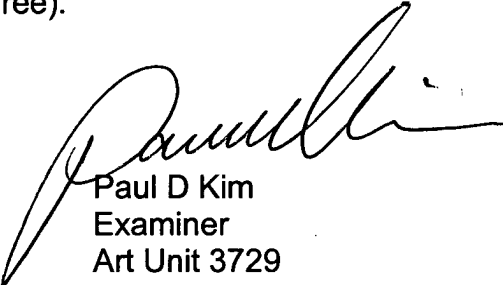
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Friday between 8:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim  
Examiner  
Art Unit 3729